

## CLAIMS

1. A method of operating a multi-axes processing device having at least one processing head formed as a processing head, for improving its positioning accuracy, comprising the steps of controlling a position change of the processing device and the associated processing head with a computer; detecting work poses of the processing device and the associated processing head controlled by a computation and control unit of the processing device; and post adjusting the work poses if necessary.

2. A method as defined in claim 1, wherein said detecting and if necessary pose-adjusting includes comparing coordinates of a work region of the at least one processing head with reference coordinates of a calibration region.

3. A method as defined in claim 2; and further comprising arranging the work region and the calibration region so that the processing device and the associated processing head during running through the

work region and through the calibration region substantially assume the work poses which are same or similar work poses.

4. A method as defined in claim 2; and further comprising defining the coordinates of the work region in a co-moving coordinate system, and defining the reference coordinates of the calibration region for at least one work pose in a stationary global coordinate system.

5. A method as defined in claim 3; and further comprising storing the coordinates of the work region and the reference coordinates in the calibration region in the computation and control unit of the processing device.

6. A method as defined in claim 2; and further comprising performing a calibration step in time intervals selected from the group consisting of regular time intervals and irregular time intervals.

7. A method as defined in claim 6; and further comprising performing the calibration processing depending on predetermined parameters selected from the group consisting of time, temperature changes, impact loads, and combinations thereof.

8. A method as defined in claim 2; and further comprising forming the work region so that it includes a plurality of work points; representing by the calibration region a selection of the work points as reference points; and determining the coordinates of the work points represented in the calibration region not by reference points but instead but interpolation in a computerized way.

9. An apparatus for operating a multi-axes processing device for improving a position accuracy, comprising a computation and control unit provided in the processing device for controlling work poses of the processing device and at least one processing head associated with the processing device; means for detecting the work poses of the processing device and the associated processing head, controlled by the computation and control units; and means for post-adjusting the poses of

the processing device and the associated processing head controlled by the computation and control unit, if necessary.

10. An apparatus as defined in claim 9, wherein said means for detecting and if necessary post-adjusting is formed so that coordinates of a work region of the processing head are compared with reference coordinates of a calibration region.

11. An apparatus as defined in claim 10, wherein said means for comparing and if necessary post adjusting includes a calibration plate which forms the calibration region representing the working region and having a plurality of reference points, wherein the reference points is a selection of work points defined in the work region.

12. An apparatus as defined in claim 11, wherein a position of the caliber plate is adapted to a position of the work regions so that the

processing device and associated processing head assume in a region of the caliber plate and in the work region substantially same work poses.

13. An apparatus as defined in claim 11, wherein the reference points on the caliber plate are formed as a flat grid so that actual work coordinates of the processing device located between the reference points are determined by interpolation.

14. An apparatus as defined in claim 11, wherein a distance from the caliber plate to the work region is changeable in a direction selected from the group consisting of a horizontal direction, a vertical direction, and both, while a relative position to the work poses of the processing device is substantially maintained.

15. An apparatus as defined in claim 11, wherein an inclination of the caliber plate is adaptable to an inclination of the work region.

16. An apparatus as defined in claim 11, wherein the reference points of the calibration plate are formed as elements selected from the group consisting of openings and pins; and further comprising a sensor which is connected with the computation and the control unit of the processing device and senses the elements.

17. An apparatus as defined in claim 16, wherein the sensor is a component of the processing head of the processing device.

18. An apparatus as defined in claim 11, wherein the reference points of the calibration plate are formed as reflecting points; and further comprising a sensor connected with the computation and control unit of the processing device and sensing the reflecting points.

19. An apparatus as defined in claim 18, wherein said sensor is a component of the processing head of the processing device.

20. An apparatus as defined in claim 19, wherein the processing device includes a plurality of the processing heads.